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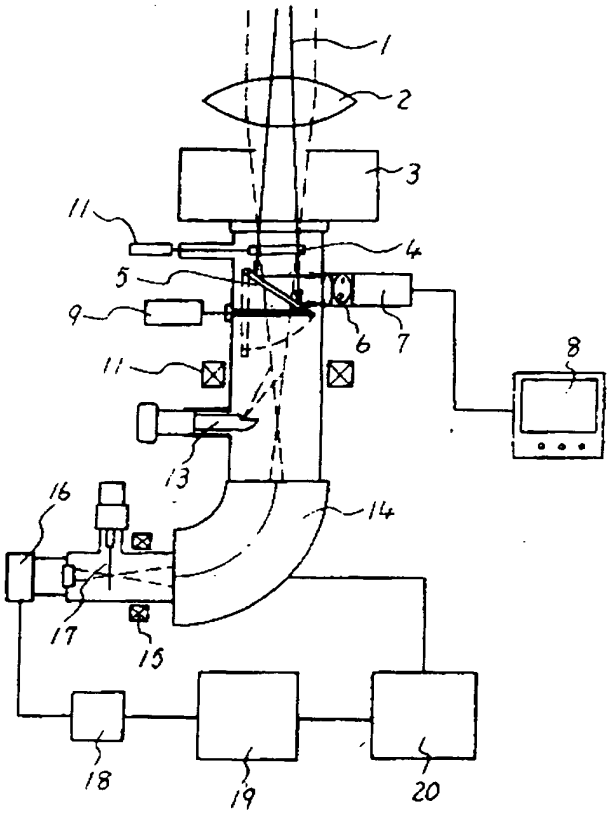
TITLE : ELECTRON MICROSCOPE



ABSTRACT : PURPOSE: To escape from the radiation of X-rays produced when an electron collides with an object as well as to prevent a drop in an S/N ratio of detector output used by deterioration in a condenser, by setting up the condenser at a position away from the axis of an electron beam.

CONSTITUTION: An electron beam 1 transmitted through an unillustrated sample is projected on an optical conversion screen 4 by a projection lens 2 and converted into light. This converted light is reflected in a rectangular direction by a reflector mirro 5 installed in the axis of the electron beam 1 at the rear step of the screen 4 while this reflected light is focused on a camera tube 7 by a condenser 6 installed in a position some distant from the axis of the electron beam 1. When both the electron beam 1 transmitted through the sample and scattering electrons collide with an object existing in a passage of the electron beam 1 or the vicinity, X-rays are generated. However, since the condenser 6 is situated in a position away from the axis of the electron beam 1, it escapes from X-ray radiation. Consequently, deterioration in the condenser 6 from which a drop in the optical penetrability of the condenser 6 may occur is prevented and thereby an S/N ratio of detector output will not come down at all.